

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims

1-26. (canceled)



27-53 (cancelled)

54. (previously presented) An exercise apparatus for muscular stimulation of a user, which apparatus comprises

a pressure sensor,

a control unit to which pressure values sensed by the pressure sensor are fed, and

a vibrational stimulator for applying vibrational stimulation to a user,

wherein

the vibrational stimulator is adapted to be activated by the control unit in response to the pressure sensor sensing an applied pressure which exceeds a threshold pressure value, and

the vibrational stimulator includes a unit which is adapted to both

(i) apply vibrational stimulation to the user when the vibrational stimulator is activated by the control unit, and

(ii) in addition to said vibrational stimulation, reciprocally move, in a predetermined manner, relative to the user in response to the pressure sensor sensing an applied pressure exceeding the threshold pressure.

55. (New) The apparatus according to claim 54, wherein the vibrational stimulator is deactivated when the pressure sensor ceases to sense an applied pressure which exceeds the threshold pressure value.

56. (New) The apparatus according to claim 54, which comprises a first set of pressure sensors for detecting pressure applied through the hands of the user.

57. (New) The apparatus according to claim 56, wherein the first set of pressure sensors detects pressure applied to a bar against which a user can push or pull with their hands.

58. (New) The apparatus according to claim 54, which comprises a second set of pressure sensors for detection of pressure applied, through the feet of a user.

59. (New) The apparatus according to claim 58, wherein the second set of pressure sensors detects pressure applied to a plate against which user can push with their feet.

60. (New) The apparatus according to claim 54, which comprises a first set of pressure sensors for detecting pressure applied through hands of a user and a second set of pressure sensors for detection of pressure applied through the feet of a user.

61. (New) The apparatus according to claim 54, wherein the pressure sensor comprises a strain gauge.

62. (New) The apparatus according to claim 54 for use by a supine user.

63. (New) The apparatus according to claim 54, wherein the control unit comprises a central processing unit.

64. (New) The apparatus according to claim 54, wherein the control unit allows a user to set at least one of the frequency, amplitude and direction of vibrations generated by the vibrational stimulator.

65. (New) The apparatus according to claim 54, wherein the control unit stores information concerning use of the apparatus by a user.

66. (New) The apparatus according to claim 54, further comprising display means for viewing during use of the apparatus by a user.

67. (New) The apparatus according to claim 54, which comprises a corresponding number of vibration stimulators and pressure sensors.

68. (New) The apparatus according to claim 67, which comprises a first vibrational stimulator associated with a first set of pressure sensors for detecting pressure applied through the hands of a user.

69. (New) The apparatus according to claim 68, wherein the first set of pressure sensors and first vibrational stimulator are associated with a bar against which a user can push or pull with their hands.

70. (New) The apparatus according to claim 67, which comprises a second vibrational stimulator associated with a second set of pressure sensors for detecting pressure applied through the feet of a user.

71. (New) The apparatus according to claim 70, wherein the second set of pressure sensors and second vibrational stimulator are associated with a plate against which a user can push with their feet.

72. (New) The apparatus according to claim 54, wherein the vibrational stimulator can deliver vibrational stimulation to a user in at least one of plurality of amplitudes, frequencies and directions.

73. (New) The apparatus according to claim 72, wherein the vibrational stimulator comprises at least one individual vibration engine, which is controlled electronically according to parameters stored by the control unit.

74. (New) The apparatus according to claim 73, wherein the parameters are manually set by a user prior to use of the apparatus.

75. (New) The apparatus according to claim 54, which comprises a bar to which a user can apply pressure through their hands, which bar is reciprocally moveable relative to the user.

76. (New) The apparatus according to claim 54, which comprises a plate to which a user can apply pressure through their feet, which plate is reciprocally moveable.

77. (New) The apparatus according to claim 54, wherein the reciprocal movement is at least one movement selected from the group consisting of a movement substantially towards and away from a user in the plane of symmetry of the user, a movement laterally in a plane substantially orthogonal to the plane of symmetry of a user, a combination of movements in both of said planes, a circular movement in one or both of said planes, and a combination of any such movements.

78. (New) The apparatus according to claim 54, wherein one of direction(s), speed and magnitude of the reciprocal movement may be predetermined by the user via the control unit.

79. (New) The apparatus according to claim 54, wherein the unit can remain substantially stationary relative to a user.

80. (New) A method for operating apparatus as defined in claim 54, which method comprises the user applying an initial pressure which is sensed by a pressure sensor, recording the initial pressure value sensed by the pressure sensor, and applying vibrational stimulation to the user by a vibrational stimulator in response: to the user applying pressure to the pressure sensor which exceeds a threshold pressure value determined by the initial pressure value.